

IN THE CLAIMS:

The text of all pending claims, (including withdrawn claims) is set forth below. Cancelled and not entered claims are indicated with claim number and status only. The claims as listed below show added text with underlining and deleted text with ~~strikethrough~~. The status of each claim is indicated with one of (original), (currently amended), (cancelled), (withdrawn), (new), (previously presented), or (not entered).

Please AMEND claim 40, and ADD new claim 52 and 53, in accordance with the following:

1-39. (Cancelled)

40. (Currently Amended) A method of channel searching for a digital television receiver, comprising:

receiving a digital broadcast signal that includes audio data, video data, and additional information;

extracting the additional information from the digital broadcast transport stream and storing the extracted additional information;

generating a channel list that is designed to be shown in a single display window, based on the stored additional information; so as to ~~and enable~~ing a user to navigate the channel list to search a two-part channel number,

wherein the channel list is made up of one or more separately identifiable channel groupings, each having one or more two-part channel numbers, where each of the one or more two-part channel numbers includes a main channel number as a first part and a sub-channel number as a second part, and where each two-part channel number of a respectively identifiable channel grouping has a same main channel number and different sub-channel numbers,

wherein the navigation of the channel list is enabled to be performed in a two-dimensional numerical-number-based order on the single display window, between two-part channel numbers of a channel grouping or between channel groupings, where the window is vertically and horizontally embedded with two-part channel numbers, and

wherein information included in the channel list is derived from program associated information ~~from~~ in received Program Specific Information (PSI) table data conforming with an MPEG standard, for plural programs included in a transport stream conforming with ~~an~~ the MPEG standard, where an identifiable program according to the MPEG standard is distinguished from a predetermined corresponding two-part channel number.

41. (Cancelled)

42. (Previously Presented) The method of claim 40, wherein the listing sequence can be determined based on proximity between respective channel grouping identifiers to allow a select current two-part channel number, of one or more two-part channel numbers corresponding to a current channel grouping identifier, to be listed along with at least one two-part channel number, of one or more two-part channel numbers corresponding to a proximally related upper close channel grouping identifier, and/or at least one two-part channel number, of one or more two-part channel numbers corresponding to a proximally related lower close channel grouping identifier.

43-45. (Cancelled)

46. (Previously Presented) The method of claim 40, wherein the channel list is configured to be navigable between two-part channel numbers, of one or more two-part channel numbers of a first channel grouping, and between the first channel grouping and a two-part channel number of a second channel grouping.

47. (Previously Presented) The method of claim 46, wherein the one or more two-part channel numbers of the first channel grouping are collectively displayed in a same direction with a first channel grouping identifier representing the first channel grouping.

48. (Previously Presented) The method of claim 40, further comprising:
receiving a command to navigate the channel list; and
displaying plural channel grouping identifiers and/or plural two-part channel numbers in a numeric order.

49. (Previously Presented) The method of claim 40, wherein the predetermined corresponding two-part channel number represents the identifiable program based on predetermined identification information unique to the program according to the MPEG standard, and a relationship, according to an ATSC standard, between the two-part channel number and the predetermined identification information unique to the program.

50. (Previously Presented) The method of claim 46, wherein the channel list is navigated in a first direction between the one or more two-part channel numbers of the first channel grouping, and navigated in a second direction between the first channel grouping and the second channel grouping.

51. (Previously Presented) A method of channel searching for a digital television receiver, comprising:

- converting a received radio frequency (RF) digital broadcast signal into a baseband signal and decoding the converted baseband signal to reconstruct a digital broadcast transport stream which includes audio data, video data, and program information;

- extracting the audio data, the video data, and the program information from the reconstructed digital broadcast transport stream and storing the extracted program information in a storage;

- processing the extracted audio data to be output as sound;

- processing the extracted video data to be output on a screen;

- accessing the storage to generate a channel list based on the stored program information, wherein the channel list is made up of one or more separately identifiable channel groupings, each having one or more two-part channel numbers, where each of the one or more two-part channel numbers includes a main channel number as a first part and a sub-channel number as a second part, and where each two-part channel number of a respectively identified channel grouping has a same main channel number and different sub-channel numbers; and

- enabling a user to navigate the channel list to search a two part channel number, wherein information included in the channel list is derived from program associated information from a Program Specific Information (PSI) table, for plural programs included in the transport stream conforming with an MPEG standard, wherein an identifiable program according to the MPEG standard is distinguished from a predetermined corresponding two-part channel number,

- wherein the channel list is configured to be navigable between two-part channel numbers, of one or more two-part channel numbers of a first channel grouping, and between the first channel grouping and a two-part channel number of a second channel grouping,

- wherein the channel list is navigated in a first direction between the one or more two-part channel numbers of the first channel grouping, and navigated in a second direction between the first channel grouping and the second channel grouping, and

- wherein the first direction is different from the second direction.

52. (New) The method of channel searching for a digital television receiver of claim 51,

wherein the PSI table is a received PSI table conforming with the MPEG standard.

53. (New) The method of channel searching for a digital television receiver of claim 52, wherein the generating of the channel list includes generating the channel list so as to be shown in a single display window and the navigation of the channel list is enabled to be performed in a two-dimensional number-based order on the single display window, with the window being vertically and horizontally embedded with two-part channel numbers.